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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/723,233	11/26/2003	David Christenson	200308910-1	9137	
22879	22879 7590 01/18/2006		EXAM	EXAMINER	
HEWLETT PACKARD COMPANY			LUU, TH	IANH X	
P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION		ART UNIT	PAPER NUMBER		
FORT COLLINS, CO 80527-2400			2878		

DATE MAILED: 01/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Application No.	Applicant(s)	
		10/723,233	CHRISTENSON ET AL.	
	Office Action Summary	Examiner	Art Unit	
		Thanh X. Luu	2878	
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the c	orrespondence address	
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE in time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).	
Status				
2a) 🗌	Responsive to communication(s) filed on <u>05 De</u> This action is FINAL . 2b)⊠ This Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro		
Dispositi	ion of Claims			
5) □ 6) ⊠ 7) ⊠ 8) □ Applicati 9) ⊠ 10) ⊠	Claim(s) 1-39 is/are pending in the application. 4a) Of the above claim(s) 1-18,23-27 and 31-37 Claim(s) is/are allowed. Claim(s) 19-21,28-30,38 and 39 is/are rejected Claim(s) 22 is/are objected to. Claim(s) are subject to restriction and/of ion Papers The specification is objected to by the Examine The drawing(s) filed on 26 November 2003 is/are Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine Replacement drawing sheet(s) including the correct Theorem Replacement drawing sheet(s) including the corr	T is/are withdrawn from consideral. Telection requirement. Te: a) ☑ accepted or b) ☐ object drawing(s) be held in abeyance. Section is required if the drawing(s) is object to the drawing(s).	ted to by the Examiner. e 37 CFR 1.85(a). ijected to. See 37 CFR 1.121(d).	
Priority (under 35 U.S.C. § 119	£		3
a)l	Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau See the attached detailed Office action for a list	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	ion No ed in this National Stage	Rest Available Copy
2) Notice 3) Information	te of References Cited (PTO-892) te of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) ter No(s)/Mail Date 11/2003.	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:		Pos

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DETAILED ACTION

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Election/Restrictions

1. Applicant's election with traverse of claims 19-22, 28-30, 38 and 39 in the reply filed on December 5, 2005 is acknowledged. The traversal is on the ground(s) that there is not serious burden in the search and the examination. This is not found persuasive because Applicant has failed to assert that the inventions are not distinct or independent. Since the inventions are classified in different class/subclasses and are of different species, as understood, there is a serious burden on the Examiner in the search and examination of all of the inventions claimed.

The requirement is still deemed proper and is therefore made FINAL.

Claims 1-18, 23-27 and 31-37 are withdrawn.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 38 and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Boella et al. (U.S. Patent 4,496,835).

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Regarding claims 38 and 39, Boella et al. disclose (see Figs. 1 and 2) an apparatus, comprising: first means (26, 27) to sense emitted light; and second means (22) to emit light in two directions, with one of the two directions being an angular direction (with respect to a center optical axis), to be sensed by the first means after passing a first window (18) of an encoder track and a second window (20) of an index track respectively, with either the first window, the second window or both refracting the passing light. That is, refraction is inherent since light passes through two different mediums with different refractive indices (air and transparent medium 13). Boella et al. also disclose (see Figs. 1 and 2) a code wheel (13) on which the encoder and the index tracks are disposed.

5. Claims 19-21, 28-30, 38 and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Takagi et al. (U.S. Patent 5,539,519).

Regarding claims 19-21, 28-30, 38 and 39, Takagi et al. disclose (see Figs. 2 and 5) an apparatus and method, comprising: a first and a second plurality of sensors (RA1, RA2, RB1, RB2, RZ1, RZ2; see Fig. 5); and a light source (4) to emit light in two or more directions (diverging light; see Fig. 2), with one of the two or more directions being an angular direction, and the light to be sensed by the first and the second plurality of sensors after passing through a first window (transparent regions between slits) of an encoder track (1), and a second window (transparent region between slits) of an index track (IZ) respectively, with either the first window, the second window or both refracting the passing light. That is, refraction is inherent since light passes through two different mediums with different refractive indices (air and transparent medium of 2).

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Takagi et al. also disclose (see Fig. 2) a code wheel (2) on which the encoder and the index tracks are disposed.

Allowable Subject Matter

6. Claim 22 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh X. Luu whose telephone number is 571-272-2441. The examiner can normally be reached on M-F 6:00AM-3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on 571-272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thanh X Luu Primary Examiner Art Unit 2878

01/2006

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